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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/456,263 | 12/07/1999 | JUSSI RUUTU | 297-009078-U | 6196 |

7590 07/25/2005

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| EXAMINER |
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FIELDS, COURTNEY D

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| ART UNIT | PAPER NUMBER |
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2137

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/456,263

Applicant(s)

RUUTU ET AL.

Examiner

Courtney D. Fields

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-11 are pending.

Response to Arguments

1. In view of the appeal brief filed on 17 May 2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 1-10 provides for the use of at least an indication of the information on which the processing is based is placed into the header of the datagram, but, since the claim does not set forth any steps involved in the method/process, it is unclear what

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method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Allowable Subject Matter

6. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Vidrascu et al. (US Patent No. 5,583,940).

As per claims 1 and 2, Vidrascu et al. discloses a method for processing IP traffic within a TCP header. For each message, at least a part of the TCP header is encrypted at the same time as the "data" part of the message without encrypting the "header" part of the message. This will enable the transmission of the message according to the IP protocol, and if the headers are not encrypted, processing including "acknowledgements" are placed into the header to indicate processing. (See Column 11, lines 1-20, Column 2, lines 1-17, and Figures 9 -12). Figure 12 along with Figure 10 of Vidrascu et al. makes it clear that elements 84 and 85 are encrypted while the remaining part of the TCP header in Figure 10 is a part of the IP header, of which the remaining part of the TCP header has the TCP acknowledgements.

As per claims 3-6, Vidrascu et al. does not explicitly state that a copy of a portion of the TCP header information is generated and placed within the IP header. However, Applicant's disclosure appears to suggest copying is merely taking the same portion (i.e. TCP acknowledgements) and placing those into a section of the IP header.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vidrascu et al. in view of RFC 791 and RFC 1883. Vidrascu et al. fail to explicitly disclose an indication of a TCP acknowledgement being placed in an options field of an IPv4 datagram, a TCP acknowledgement being placed in the extension header of an IPv6 datagram, and a payload field of an IP datagram.

As per claim 7, Vidrascu et al. as modified discloses the structure of an IPv4 header. The IPv4 header contains an Options field. The options field contains either an option-type octet only, or an option type octet, an option length octet and data portion. The option-type octet has three fields which indicates whether the option field should be copied to a fragment of an IP datagram. (See RFC 791, pages 12-13) The data portion of the options field contains data within a TCP header. (See RFC 791, page 3, Section 1.3) The data can be used as an indication of a TCP acknowledgement.

As per claim 8, Vidrascu et al. as modified, discloses the structure of an IPv6 header. The IPv6 header contains an Extension header. The extension header contains a Next header, a payload length, etc. The next header specifies the type of the following extension header. The indication of a TCP acknowledgement within the extension header is performed by a special value in the next header field specifying that no more headers follow this specific header. (See RFC 1883, pages 4-5)

As per claim 9, Vidrascu et al. as modified discloses a source network element generating IP datagrams, an intermediate network element forwards the IP datagrams to a destination network element and the destination network element receives the IP

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datagrams, and the intermediate network element modifying the copy of the information on which the processing is based. (See RFC 1883, pages 9-11)

As per claim 10, Vidrascu et al. as modified discloses the destination network element using the modified copy of the information instead of the encrypted version of the information carried as the payload of the IP datagram. (See RFC 1883, pages 22-23)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Vidrascu et al.'s method of enciphering messages using IP and TCP protocols by combining RFC 791 and 1883 protocols for IPv4 and IPv6. This combination will enhance the performance of IP data traffic over interconnected networks. (See RFC 791, page 3)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney D. Fields whose telephone number is 571-272-3871. The examiner can normally be reached on Mon - Thurs. 6:00 - 4:00 pm; off every Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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July 13, 2005

Matthew D. Smithers
MATTHEW SMITHERS
PRIMARY EXAMINER
Art Unit 2137